where transmission errors occur frequently such as data transmission via a radio transmission path, it is commonly in practice to improve transmission quality by conducting error correction of the transmitted data (FEC: Forward

5   Error Correction). For error-correcting codes and error-correcting decoding, for example, a convolutional code and maximum likelihood decoding methods such as Viterbi decoding are used.

In addition, in the method where the receiving side

10   determines the rate by using the error-detecting code that is added to the transmitted data to indicate the transmission quality without sending any rate information, a decision error rate in determining the rate depends on a word length of the error-detecting code and doesn't

15   decrease below a certain rate-decision error rate (namely, a probability of determining that no transmission error exists for an erroneous rate) even if the transmission error goes down.

On the other hand, in the case where the rate

20   information is sent from the transmitting side to the receiving side, if an error occurs during transmission, an effective data length in the received frame cannot be judged and it becomes difficult for the receiving side to reproduce the transmitted data correctly even if no error

25   occurs in the data part.

Therefore, conventionally there has been devised a method whereby the rate-decision error rate was improved